

**MAGNETIC RESONANCE IMAGING OF DIFFERENT CHEMICAL SPECIES IN A
SYSTEM HAVING MAGNETIC FIELD HETEROGENEITIES**

ABSTRACT OF THE DISCLOSURE

5 A multi-point chemical species (e.g., water, fat) separation process which is compatible with rapid gradient echo imaging such as SSFP uses an iterative least squares method that decomposes water and fat images from source images acquired at short echo time increments. The single coil algorithm extends to multi-coil reconstruction with minimal additional complexity.

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